

## ABSTRACT OF THE DISCLOSURE

A multi-way multiplex communication system includes (a) a subsidiary station covering terminals to each of which an analog line, a basic rate interface (BRI) line and a primary rate interface (PRI) line are connected, and (b) a base station which assigns the requisite number of time slots to thereby make radio communication with the subsidiary station in dependence on vacant time slots between the subsidiary station and the base station. The base station defines a subscriber class which determines an order in using a time slot to make radio communication with a H-channel terminal, monitors vacant time slots on receipt of a request of making a call, from the H-channel terminal, and controls call connection, based on the subscriber class, when it is impossible to connect a call because of shortage of vacant time slots, thereby ensuring a time slot for the H-channel terminal to make radio communication between the subsidiary station and the base station.